

**STATEMENT OF**  
**ALEXANDER KARSNER**  
**ASSISTANT SECRETARY FOR ENERGY EFFICIENCY**  
**AND RENEWABLE ENERGY**

**U.S. DEPARTMENT OF ENERGY**

**BEFORE THE**

**COMMITTEE ON APPROPRIATIONS**  
**SUBCOMMITTEE ON ENERGY AND WATER**  
**UNITED STATES SENATE**

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Mr. Chairman, Senator Domenici, Members of the Committee, thank you for the opportunity to testify before you today on S. 875, the Security and Fuel Efficiency Energy Act of 2007, and on the policies and funding necessary for reducing U.S. oil dependence.

In his 2007 State of the Union address, President Bush challenged our country to reduce gasoline consumption by 20 percent in the next 10 years, the “Twenty in Ten” plan. The President called for a robust Alternative Fuel Standard (AFS), requiring the equivalent of 35 billion gallons of renewable and alternative fuel in 2017. This goal is a significant expansion of the 7.5 billion gallon renewable fuel target now in law for 2012, under the Renewable Fuels Standard. Expanding the mandate established by the Energy Policy Act of 2005 (EPACT 2005) is expected to decrease projected gasoline use by 15 percent. Another five percent reduction in gasoline consumption can be achieved through the Administration’s proposal to reform CAFE standards. The “Twenty in Ten” plan holds the promise of diversifying the sources, types, and volumes of fuels we use, while reducing our vulnerabilities and dependence on oil. Only through transformational technological change can these goals be achieved, and we believe that the Administration’s proposals provide the tools to achieve them.

### **S. 875, the SAFE Energy Act**

While the Administration has not had sufficient time to coordinate interagency views of S. 875, the SAFE Energy Act of 2007, I am pleased to offer some preliminary comments on the legislation. While the Department of Transportation (DOT) has primary authority for addressing the President’s call to reform and elevate CAFE standards, the Department of Energy (DOE) invests in the vehicle technologies and attests to their availability to increase fleet efficiency. Those provisions of the bill that broadly support the President’s vision of increasing efficiency along side technologies to displace fuel consumption are integral to a comprehensive national strategy.

Title II of S. 875 supports the President’s goal of deploying increased volumes of renewable fuels. The Administration believes, however, that we must have a manageable timeframe for fuels and infrastructure deployment, and that a 10-year goal is an ambitious and appropriate metric. However, the Administration also believes that once a standard is set, the market should be allowed to determine which options succeed, and therefore, the President’s proposal broadens the market by expanding the alternative fuel options that can meet the standard. In addition, the President’s proposal also provides for a flexible means for industry to comply with the alternative fuel standard requirements. First, it includes a banking and trading system that allows participants to meet their obligations by purchasing credits from other complying parties. Credits could also be purchased from the Federal Government, thereby providing an automatic economic “safety valve”.

In effect, credits would be offered for sale to entities subject to the AFS mandate – those who refine, blend and import gasoline – and they would have the ability to comply: (1) by using a sufficient amount of alternative fuel in motor vehicle and nonroad fuels they produce or import; (2) by buying credits that may be available in the private marketplace; or (3) by purchasing credits directly from the Government. This is intended to guard against “price spikes” where an insufficient supply of alternative fuel or alternative fuel credits drives up the prices.

The credits available under the automatic economic “safety valve” in the President’s proposal are for sale by the Government set at the price of \$1.00 per gallon of ethanol equivalent. This feature provides some market certainty -- businesses can calculate their maximum cost of compliance. They then can use their ingenuity to deliver value and minimize their compliance costs. The \$1.00 safety valve does not protect against other factors that may cause increases in gasoline prices (e.g., geopolitical tensions or weather-related disruptions), but those can be addressed through administrative waivers if necessary.

Title II also contains provisions that focus on infrastructure development, which is a vital component of achieving energy security. The primary focus of S. 875 is on adoption of E85 infrastructure, an important end goal for ethanol deployment. However, the Administration also believes that government policy should not be dictating the fuel that the market adopts, but should allow diverse fuels to compete. Provisions that also accelerate early adoption of intermediate fuel blends could serve as a useful bridge toward the ultimate goal of energy security. We support those provisions of the bill that are consistent with the President’s goals, particularly the areas of emerging biofuels and assessments of renewable fuels incentives.

Finally, although S. 875 takes important steps toward energy security, the United States and all major oil-consuming countries currently rely on petroleum as a major fuel source. Development of alternative fuels reduces the vulnerability of this economy to the severe consequences of a major disruption in world wide oil supplies and assists in our long-term goal of transforming our energy economy.

Over the last 30 years, we have invested in the Strategic Petroleum Reserve to provide us protection against these types of disruptions. While the Reserve is robust, with an inventory of 690 million barrels, and has provided relief to oil consumers after supply shortages, our projected growth rates indicate that the Reserve needs to be much larger. Even allowing for successful implementation of the legislation before the Congress, we must deal with the vulnerabilities associated with concentration of the world’s petroleum reserves in unstable regions.,

The Administration is taking steps to increase the inventory of the Reserve to 727 million barrels, the current capacity, and to make the necessary expansions to reach 1 billion barrels as authorized under EPACT 2005. The Administration believes that our energy security requires we go even further and authorize an increase in the size of the Reserve to 1.5 billion barrels. We urge Congress to support the President’s request for \$168 million in Fiscal Year (FY) 2008 to fund expansion. That funding will allow us to buy land and rights of way, and to do all of the detailed design and engineering work necessary to expand the existing Reserve sites at Bayou Choctaw, Louisiana, and Big Hill, Texas, as well as a new site near Richton, Mississippi, and NEPA work for expansion to 1.5 billion barrels.

## ENERGY SECURITY LEADERSHIP COUNCIL REPORT

Today's hearing also addresses a recently released assessment of the economic impacts of implementing the Energy Security Leadership Council's *Recommendations to the Nation on Reducing U.S. Oil Dependence*. The analysis demonstrates the countless benefits that can be achieved if we as a country commit to altering our energy portfolio. We are committed to making progress toward that goal. The President's *Advanced Energy Initiative* (AEI) and "Twenty in Ten" goal, along with EPACT 2005, contribute to a roadmap for energy security. The Department is implementing EPACT 2005, and we are already beginning to see the results.

For example, the Council's recommendations include providing financial assistance for six or more biorefineries employing a variety of feedstocks, located in various regions of the country. In fact, Secretary Bodman recently announced that DOE, under the authority provided in EPACT section 932, will invest up to \$385 million for as many as six commercial-scale biorefinery projects over the next four years, subject to appropriations. These funds, combined with industry's cost share, could lead to more than \$1.2 billion in public and private sector investment in these biorefineries. In addition, just last week Secretary Bodman announced the availability of up to \$200 million, subject to appropriations, for cellulosic biorefineries at 10 percent of commercial scale, also in accordance with EPACT section 932. This effort will enable industry to resolve remaining technical and process integration uncertainties and allow for more predictable, less costly scale up of "next generation" biorefinery process technologies. The 10-percent scale demonstrations have the potential to reduce the overall cost and risk to industry and contribute to the quicker commercialization of larger-scale facilities.

EERE's Biomass Program is focused on making cellulosic ethanol cost-competitive by 2012, a target put forth in the AEI. In FY 2007, including funds appropriated under the Continuing Resolution, the Department has allocated approximately \$200 million for EERE's Biomass and Biorefinery Systems R&D program to implement key activities necessary to achieve the 2012 goal for cost-competitive cellulosic ethanol.

The Department is also working with public and private sector partners to encourage development and deployment of a biofuels distribution infrastructure in the United States. The Department is pursuing a number of infrastructure activities, including analyses of pipelines, water issues, and advanced vehicle technologies. The biofuels infrastructure team is also assessing the impacts of higher-level intermediate blends of ethanol (e.g., E15 and E20), renewable fuels pipeline feasibility and materials research, and optimization of E85 alternative fuel vehicles. This work is being coordinated with the Department of Transportation, which sets and enforces standards for the safe transportation of petroleum products and hazardous liquids by all modes of transportation, including pipelines.

## ACHIEVING ENERGY SECURITY

The question that is most urgently before this Subcommittee, I believe, is how many federal dollars will it take to end our dependence on oil. I suggest to you, Mr. Chairman, that there is no amount of federal spending that can achieve this goal. If we are serious about changing our

Nation's energy portfolio, we must unleash the vast potential of capital markets. The Federal Government's greatest contribution to energy security is the enactment of durable policy that signals to private investors our long-term commitment to alternative sources of energy. Government funding alone will not be enough to bring about the magnitude of change at the rate required to address our critical security, economic, and environmental concerns.

We have made great progress in the development of clean energy and energy efficiency technologies. Renewable sources of electric generation, like wind across the Great Plains and solar in the Southwest, are already cost competitive in many locations. Highly efficient buildings that generate as much energy as they consume are a reality and proceeding down the cost curve. Emission-free nuclear energy is postured to substantially contribute to both energy security and environmental stewardship. Carbon capture and storage will enable coal to retain its important contribution to the energy mix.

The challenge for large scale, up front investments in clean energy is that the potential for outstanding returns must be realized over an extended period of time, or the "lifecycle" of the technology's use. This is true whether dealing with a solar rooftop, cellulosic biorefineries, large wind farms, nuclear power plants, energy efficient products like the ubiquitous compact fluorescent lamp, or transmission linking our clean energy sources with urban loads. Though clean energy sources are domestically available and generate little to no greenhouse gases, uncertainty over the necessary technologies' "lifecycle" risks and costs severely retards the amount and types of private capital being deployed. Rapid commercialization of clean energy technologies requires sophisticated capital risk management to facilitate complex financial transactions. That risk assessment is what the private sector does best. Effective capital formation requires the Federal Government to provide the necessary policy predictability and economic climate that enables massive investments at an accelerated pace. Responsible use of federal tax policy to catalyze and accelerate private infrastructure financing and capitol flows is essential to enable our vision of a new clean energy future.

The President's Advanced Energy Initiative and "Twenty in Ten" goal, along with full implementation of EPACT 2005, hold the promise of accelerating deployment of clean, renewable energy and energy efficiency technologies. To meet these challenges, cutting edge research and development must be supported by consistent, long-range policy actions, such as the proposal that the President articulated in the State of the Union.

Mr. Chairman, this concludes my prepared statement, and I would be happy to answer any questions the Subcommittee members may have.